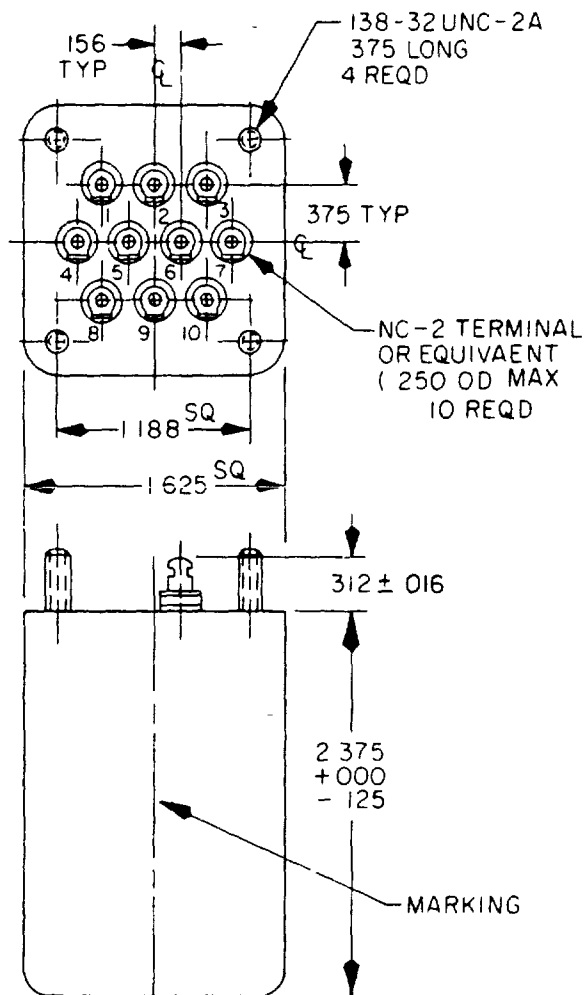


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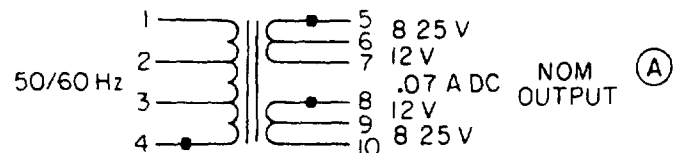
TRANSFORMER, POWER, STEP-DOWN, TF4S03AJ

This specification is approved for use by all Departments and Agencies of the Department of Defense

The complete requirements for procuring the transformer described herein shall consist of this document and the latest issue of Specification MIL-T-27.



INCHES	MM
.016	41
.063	1 60
.125	3 18
.138	3 51
.156	3 96
.250	6 35
.312	7 92
.375	9 52
1 188	30 18
1 625	41 28
2 375	60 32



PRI (2-4) 115 V → NOM OUTPUT
 (1-4) 115 V → -6% NOM OUTPUT
 (1-3) 115 V → +6% NOM OUTPUT
 (2-3) 115 V → +12% NOM OUTPUT
 WORKING VOLTAGE (PEAK) = 535 V

CIRCUIT DIAGRAM AND MARKING

NOTES

- 1 Dimensions are in inches
- 2 Metric equivalents are given for general information only and are based upon 1 00 inch = 25 4 mm
- 3 Tolerance on terminal position dimensions is ± 016 inch
- 4 Unless otherwise specified, tolerance on overall case dimensions is + 000, - 063 inch
- 5 Marking shall be on the side of the case

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FIGURE 1 Dimensions and configuration

(A) denotes changes

REQUIREMENTS (When numbers in parentheses, i e, (1-2) are used, they indicate the winding and the extreme terminals of the winding) . . .

Electrical ratings

TABLE I. Electrical ratings

Dash no.	Primary voltage	Secondary voltage			
		(5-6)	(6-7)	(8-9)	(9-10)
01	(2-4) 115 V, 50/60 Hz	8.25 V	12.0 V	12.0 V	8.25 V
	(1-4) 115 V, 50/60 Hz	7.76 V	11.28 V	11.28 V	7.76 V
	(1-3) 115 V, 50/60 Hz	8.74 V	12.72 V	12.72 V	8.74 V
	(2-3) 115 V, 50/60 Hz	9.24 V	13.44 V	13.44 V	9.24 V

- Ⓐ Primary current 120 mArms maximum
- Ⓐ Secondary current 105 mArms maximum (5-7), (8-10)
- Ⓐ VA 4.8
- Working voltage (peak) 535 volts

Design and construction

- Dimensions and configuration See figure 1
- Duty cycle Continuous
- Case Metal encased
- Terminals Solder terminal, NC-2 or equivalent
- Terminal height 0.312 inch ± 0.016
- Ⓐ Weight 397 grams, maximum
- Altitude 10,000 feet maximum
- Operating temperature range -55°C to +130°C

Terminal strength MIL-STD-202, method 211, test condition A, 5.0 pounds and test condition E, 8.0 ounce-inches

Vibration (high frequency) MIL-STD-202, method 204

Dielectric withstanding voltage
At sea level 1,500 Vrms

Electrical characteristics

- No load With 115 volts, 60 Hz across (2-4), current in (2-4) shall not exceed 120 mA and the power in (2-4) shall not exceed 1.2 watts
- Ⓐ Voltage across
 - (5-7) 24.86 volts ± 5 percent
 - (8-10) 24.86 volts ± 5 percent
- Ⓐ Rated load With 115 volts, 60 Hz across (2-4), the voltage across (5-7) and (8-10) shall be 20.25 volts ± 5 percent @ 105 mArms
- DC resistance
 - (1-4) 200 ohms, maximum
 - (8-10) 27 ohms, maximum
 - (5-7) 24 ohms, maximum
- Polarity Additive, with 1 and 5, and 7 and 8 connected
- Ⓐ Temperature rise 40°C with 115 volts rms, 60 Hz across (2-4) at an ambient temperature of 90°C

Marking location See figure 1

Part number M27/156-01

Custodians

Army - ER

Navy - EC

Air Force - 85

Review activities

Army - MI, SC

Navy - SH, OS

Air Force - 11, 17, 99

DLA - ES

User activities

Army - AR, ME

Navy - MC, AS

Air Force - 19

Preparing activity

Army - ER

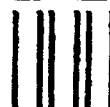
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DLA - ES

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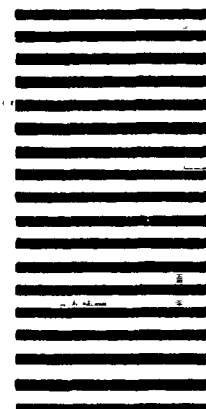
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TF4S03AJ

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